Amendments to the Claims:

1. (currently amended)   A device for encoding a bit stream of databits of a binary source signal into a stream of databits of a binary channel signal, m-bit source words are converted to n-bit codewords, the device comprising:

converting means used to convert source words having a variable word length with a basic word length of m bits and a total word length of $m*i$ bits into $n*i$-bit codewords, i being an integer of at least 1;

wherein the converting means limits a characteristic of the codewords specified for each starting bit position in the codeword ~~code word~~.

2. (original)   The device of claim 1, wherein the converting means preserves the parity of the m-bit source words over the codewords.

3. (original)   The device of claim 1, wherein the converting means limits a maximum number of repeating bit patterns specified for each starting bit position in the codewords.

4. (original)   The device of claim 1, wherein the converting means limits a maximum number of the consecutive appearances of the minimum run of zeros d for each starting bit position in the codewords.

5. (original)   The device of claim 1, wherein the converting means limits a maximum run of zeros k for each starting bit position in the codewords.

6. (currently amended)   <u>A device for encoding a bit stream of databits of a binary source</u>

signal into a stream of databits of a binary channel signal, m-bit source words are converted to n-bit codewords, the device comprising:

5   converting means used to convert source words having a variable word length with a basic word length of m bits and a total word length of m*i bits into n*i-bit codewords, i being an integer of at least 1;

wherein the converting means limits a characteristic of the codewords specified for each starting bit position in the codeword; and

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~~The device of claim 1, wherein~~ the codewords are a variable length code (d, kVAR; m, n; r; RMTRVAR), wherein r is a maximum value of i and is at least 2, d is a minimum run of zeros, kVAR is a maximum run of zeros specified for each starting bit position in the codewords, and RMTRVAR is a maximum number of consecutive appearances of the minimum run of zeros d specified for each starting bit position in the codewords.

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7. (original)   The device of claim 6, wherein the variable length code comprises:

20      $d = 1$;

$RMTR_{VAR} = (3,4,3)$;

$k_{VAR} = (6,7,7)$;

$m = 2$;

$n = 3$; and

25      $r = 5$.

8. (original)   The device of claim 6, wherein the variable length code comprises:

$d = 1$;

$RMTR_{VAR} = (4,5,4)$;

$k_{VAR}r = (6,7,6)$;

$m = 2$;

5 $n = 3$; and

$r = 5$.

9. (original) The device of claim 1, wherein the converting means determines the codewords by referring to an immediately succeeding string of m-bit source words.

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10. (currently amended) The device of claim 1, wherein the converting means determines the codewords by referring to an immediately preceding codeword ~~code word~~.

11. (currently amended) A device for decoding a bit stream of databits of a binary

15 channel signal into a stream of databits of a binary source signal, n bits channel codewords are converted to m-bit source words, the device comprising:

converting means used to convert codewords having a variable code length with a basic code length of n bits and a total code length of n*i bits into m*i-bit source

20 words, i being an integer of at least 1;

wherein the bit stream of channel codewords ~~code words~~ have a characteristic specified for each starting bit position in the codeword ~~code word~~.

25 12. (original) The device of claim 11, wherein the converting means preserves the parity of the codewords over the m-bit source words.

13. (original) The device of claim 11, wherein the codewords are limited with a

maximum number of repeating bit patterns specified for each starting bit position.

14. (original) The device of claim 11, wherein codewords are limited with a maximum number of the consecutive appearances of the minimum run of zeros d for each starting bit position in the codewords.

15. (original) The device of claim 11, wherein codewords are limited with a maximum run of zeros k for each starting bit position in the codewords.

16. (currently amended) A device for decoding a bit stream of databits of a binary channel signal into a stream of databits of a binary source signal, n bits channel codewords are converted to m-bit source words, the device comprising:

converting means used to convert codewords having a variable code length with a basic code length of n bits and a total code length of n*i bits into m*i-bit source words, i being an integer of at least 1;

wherein the bit stream of channel codewords have a characteristic specified for each starting bit position in the codeword; and

~~The device of claim 11, wherein~~ the codewords are a variable length code (d, kVAR; m, n; r; RMTRVAR), wherein r is a maximum value of i and is at least 2, d is a minimum run of zeros, kVAR is a maximum run of zeros specified for each starting bit position in the codewords, and RMTRVAR is a maximum number of consecutive appearances of the minimum run of zeros d specified for each starting bit position in the codewords.

17. (original) The device of claim 16, wherein the variable length code comprises:

$d = 1$;

$RMTR_{VAR} = (3,4,3)$;

$k_{VAR} = (6,7,7)$;

5      $m = 2$;

$n = 3$; and

$r = 5$.

18. (original) The device of claim 16, wherein the variable length code comprises:

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$d = 1$;

$RMTR = (4,5,4)$;

$kvar = (6,7,6)$;

$m = 2$;

15      $n = 3$; and

$r = 5$.

19. (original) The device of claim 11, wherein the converting means determines the
m-bit source words by referring to an immediately succeeding string of codewords.

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20. (currently amended) A method for encoding a bit stream of databits of a binary
source signal into a stream of databits of a binary channel signal, m-bit source
words are converted to n-bit codewords, the method comprising:

25   converting source words having a variable word length with a basic word length of
m bits and a total word length of m*i bits into n*i-bit codewords, i being an integer
of at least 1; and

limiting a characteristic of the codewords specified for each starting bit position in the codeword ~~code word~~.

21. (original)   The method of claim 20, further comprising preserving the parity of the

5   m-bit source words over the codewords.

22. (original)   The method of claim 20, wherein limiting a characteristic of the codewords further comprises limiting a maximum number of repeating bit patterns specified for each starting bit position in the codewords.

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23. (original)   The method of claim 20, wherein limiting a characteristic of the codewords further comprises limiting a maximum number of the consecutive appearances of the minimum run of zeros d for each starting bit position in the codewords.

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24. (original)   The method of claim 20, wherein limiting a characteristic of the codewords further comprises limiting a maximum run of zeros k for each starting bit position in the codewords.

20   25. (currently amended)   A method for encoding a bit stream of databits of a binary source signal into a stream of databits of a binary channel signal, m-bit source words are converted to n-bit codewords, the method comprising:

converting source words having a variable word length with a basic word length of

25   m bits and a total word length of m*i bits into n*i-bit codewords, i being an integer of at least 1; and

limiting a characteristic of the codewords specified for each starting bit position in

the codeword;

~~The method of claim 20,~~ wherein the codewords are a variable length code (d, kVAR; m, n; r; RMTRVAR), wherein r is a maximum value of i and is at least 2, d is a minimum run of zeros, kVAR is a maximum run of zeros specified for each starting bit position in the codewords, and RMTRVAR is a maximum number of consecutive appearances of the minimum run of zeros d specified for each starting bit position in the codewords.

26. (original) The method of claim 25, wherein the variable length code comprises:

$d = 1$;

$RMTR_{VAR} = (3,4,3)$;

$k_{VAR} = (6,7,7)$;

$m = 2$;

$n = 3$; and

$r = 5$.

27. (original) The method of claim 25, wherein the variable length code comprises:

$d = 1$;

$RMTR_{VAR} = (4,5,4)$;

$k_{VAR}r = (6,7,6)$;

$m = 2$;

$n = 3$; and

$r = 5$.

28. (original) The method of claim 20, further comprising determining the codewords by

referring to an immediately succeeding string of m-bit source words.

29. (currently amended) The method of claim 20, further comprising determining the codewords by referring to an immediately preceding codeword ~~code word~~.

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30. (currently amended)   A method for decoding a bit stream of databits of a binary channel signal into a stream of databits of a binary source signal, n bits channel codewords being converted to m-bit source words, and the method comprising:

10   converting codewords having a variable code length with a basic code length of n bits and a total code length of $n*i$ bits into $m*i$-bit source words, i being an integer of at least 1; and

specifying a characteristic for each starting bit position in the channel codewords
15   ~~code words~~.

31. (original)   The method of claim 30, further comprising preserving the parity of the codewords over the m-bit source words.

20   32. (original)   The method of claim 30, wherein the codewords are limited with a maximum number of repeating bit patterns specified for each starting bit position in the codewords.

33. (original)   The method of claim 30, wherein the codewords are limited with a
25   maximum number of consecutive appearances of a minimum run of zeros d specified for each starting bit position in the codewords.

34. (original)   The method of claim 30, wherein the codewords are limited with a

maximum run of zeros k specified for each starting bit position in the codewords.

35. (currently amended) <u>A method for decoding a bit stream of databits of a binary</u>
<u>channel signal into a stream of databits of a binary source signal, n bits channel</u>

5   <u>codewords being converted to m-bit source words, and the method comprising:</u>

<u>converting codewords having a variable code length with a basic code length of n</u>
<u>bits and a total code length of n*i bits into m*i-bit source words, i being an integer</u>
<u>of at least 1; and</u>

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<u>specifying a characteristic for each starting bit position in the channel codewords;</u>

~~The method of claim 30,~~ wherein the codewords are a variable length code (d,
kVAR; m, n; r; RMTRVAR), wherein r is a maximum value of i and is at least 2, d is

15   a minimum run of zeros, kVAR is a maximum run of zeros specified for each
starting bit position in the codewords, and RMTRVAR is a maximum number of
consecutive appearances of the minimum run of zeros d specified for each starting
bit position in the codewords.

20   36. (original) The method of claim 35, wherein the variable length code comprises:

$d = 1$;
$RMTR_{VAR} = (3,4,3)$;
$k_{VAR} = (6,7,7)$;

25      $m = 2$;
$n = 3$; and
$r = 5$.

37. (original)   The method of claim 35, wherein the variable length code comprises:

$d = 1$;

$RMTR = (4,5,4)$;

5   $kvar = (6,7,6)$;

$m = 2$;

$n = 3$; and

$r = 5$.

10   38. (original)   The method of claim 30, further comprising determining the m-bit source words by referring to an immediately succeeding string of codewords.

39. (new) The method of claim 1, wherein the starting bit positions of the codewords are defined in order of the bits of each codeword, each codeword having a first bit
15   position corresponding to the first bit of the codeword and a last bit position corresponding to the last bit of the codeword.

40. (new) The method of claim 11, wherein the starting bit positions of the codewords are defined in order of the bits of each codeword, each codeword having a first bit
20   position corresponding to the first bit of the codeword and a last bit position corresponding to the last bit of the codeword.

41. (new) The method of claim 20, wherein the starting bit positions of the codewords are defined in order of the bits of each codeword, each codeword having a first bit
25   position corresponding to the first bit of the codeword and a last bit position corresponding to the last bit of the codeword.

42. (new) The method of claim 30, wherein the starting bit positions of the codewords are

defined in order of the bits of each codeword, each codeword having a first bit position corresponding to the first bit of the codeword and a last bit position corresponding to the last bit of the codeword.

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